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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,878	04/05/2004	Hiroshi Ishihara	251202US2	2667

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EXAMINER	
VO, QUANG N	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
07/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/816,878	ISHIHARA, HIROSHI	
	Examiner	Art Unit	
	Quang N. Vo	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/18/04;2/10/06;3/27/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-30, 41-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Yokochi (Pub. No.: US 2003/0202193).

With regard to claim 1, Yokochi discloses an image processing apparatus (paragraph 0002) for generating graphics data according to picture description instructions based on original image data of full color, comprising: a chromatic tester configured to determine whether a pixel of the original image data is chromatic or achromatic (paragraph 0014); an obtainer configured to obtain an image property of the pixel (paragraph 0015); a color converter configured to convert the original image data into CMYK data for printing according to a predetermined converting condition (paragraph 0055); and a converting condition designator configured to designate a type of the predetermined converting condition for the pixel determined as achromatic by said chromatic tester according to the image property obtained by said obtainer (paragraph 0056).

With regard to claim 2, Yokochi discloses wherein said chromatic tester determines the pixel as achromatic when values of RGB color components are identical to each other (paragraphs 0082, 0109).

With regard to claim 3, Yokochi discloses wherein said chromatic tester determines the pixel as achromatic when differences in data value among RGB components of the pixel fall within respective predetermined threshold values (paragraph 0109).

With regard to claim 4, Yokochi discloses wherein the predetermined condition used for the pixel determined as achromatic is any one of a K monochrome converting condition using a black color and a normal converting condition using cyan, magenta, yellow, and black colors (paragraph 0056).

With regard to claim 5, Yokochi discloses wherein said obtainer checks pixels in a predetermined area in the original image data to obtain the image property of the pixel (paragraphs 0015, 0016).

With regard to claim 6, Yokochi discloses wherein the image property of the pixel is either one of a first image property of including any chromatic pixel in the pixels in the predetermined area and a second property of not including any chromatic pixel in the pixels in the predetermined area, and said converting condition designator designates the K monochrome converting condition to the pixel having the first image property (paragraphs 0072, 0077).

With regard to claim 7, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately preceding the pixel in a main scanning direction (paragraph 0015).

With regard to claim 8, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately succeeding the pixel in a main scanning direction (paragraph 0016).

With regard to claim 9, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately preceding and succeeding the pixel in a main scanning direction (paragraphs 0015, 0090).

With regard to claim 10, Yokochi discloses wherein the predetermined area is formed with an m-by-n matrix surrounding the pixel, m and n being positive integer values greater than zero (paragraph 0090).

With regard to claim 11, Yokochi discloses an image processing apparatus (paragraph 0002) for generating graphics data according to picture description instructions based on original image data of full color, comprising: chromatic checking means for checking to determine whether a pixel of the original image data is chromatic or achromatic (paragraph 0014); obtaining means for obtaining an image property of the pixel (paragraph 0015); color converting means for converting the original image data into CMYK data for printing according to a predetermined converting condition (paragraph 0055); and converting condition designating means for designating a type of the predetermined converting condition for the pixel determined as achromatic by said chromatic checking means according to the image property obtained by said obtaining means (paragraph 0056).

With regard to claim 12, Yokochi discloses wherein said chromatic checking means determines the pixel as achromatic when values of RGB color components are identical to each other (paragraphs 0082, 0109).

With regard to claim 13, Yokochi discloses wherein said wherein said chromatic checking means determines the pixel as achromatic when differences in data value among RGB components of the pixel fall within respective predetermined threshold values (paragraph 0109).

With regard to claim 14, Yokochi discloses wherein the predetermined condition applied to the pixel determined as achromatic is any one of a K monochrome converting condition using a black color and a normal converting condition using cyan, magenta, yellow, and black colors (paragraph 0056).

With regard to claim 15, Yokochi discloses wherein said obtaining means checks pixels in a predetermined area in the original image data to obtain the image property of the pixel (paragraphs 0015, 0016).

With regard to claim 16, Yokochi discloses wherein the image property of the pixel is either one of a first image property of including any chromatic pixel in the pixels in the predetermined area and a second property of not including any chromatic pixel in the pixels in the predetermined area, and said converting condition designating means designates the K monochrome converting condition to the pixel having the first image property (paragraphs 0072, 0077).

With regard to claim 17, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately preceding the pixel in a main scanning direction (paragraph 0015).

With regard to claim 18, Yokochi discloses wherein in the predetermined area comprises a predetermined number of sequential pixels immediately succeeding the pixel in a main scanning direction (paragraph 0016).

With regard to claim 19, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately preceding and succeeding the pixel in a main scanning direction (paragraphs 0015, 0090).

With regard to claim 20, Yokochi discloses wherein the predetermined area is formed with an m-by-n matrix surrounding the pixel, m and n being positive integer values greater than zero (paragraph 0090).

With regard to claim 21, Yokochi discloses a graphics data processing method (paragraph 0002) for generating graphics data according to picture description instructions based on original image data of full color, the graphics data processing method comprising the steps of: determining whether a pixel of the original image data is chromatic or achromatic (paragraph 0014); obtaining an image property of the pixel (paragraph 0015); designating a type of a predetermined converting condition for the pixel determined as achromatic by said determining step according to the image property obtained in said obtaining step (paragraph 0056); and converting the original image data into CMYK data according to the predetermined converting condition (paragraph 0055).

With regard to claim 22, Yokochi discloses wherein said chromatic checking step determines the pixel as achromatic when values of RGB color components are identical to each other (paragraphs 0082, 0109).

With regard to claim 23, Yokochi discloses wherein said chromatic checking step determines the pixel as achromatic when differences in data value among RGB components of the pixel fall within respective predetermined threshold values (paragraph 0109).

With regard to claim 24, Yokochi discloses wherein the predetermined condition applied to the pixel determined as achromatic is any one of a K monochrome converting condition using a black color and a normal converting condition using cyan, magenta, yellow, and black colors (paragraph 0056).

With regard to claim 25, Yokochi discloses wherein said obtaining step checks pixels in a predetermined area in the original image data to obtain the image property of the pixel (paragraphs 0015, 0016).

With regard to claim 26, Yokochi discloses wherein the image property of the pixel is either one of a first image property of including any chromatic pixel in the pixels in the predetermined area and a second property of not including any chromatic pixel in the pixels in the predetermined area, and said designating step designates the K monochrome converting condition to the pixel having the first image property (paragraphs 0072, 0077).

With regard to claim 27, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately preceding the pixel in a main scanning direction (paragraph 0015).

With regard to claim 28, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately succeeding the pixel in a main scanning direction (paragraph 0016).

With regard to claim 29, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately preceding and succeeding the pixel in a main scanning direction (paragraphs 0015, 0090).

With regard to claim 30, Yokochi discloses wherein the predetermined area is formed with an m-by-n matrix surrounding the pixel, m and n being positive integer values greater than zero (paragraph 0090).

With regard to claim 41, Yokochi discloses a computer readable medium storing computer instructions for causing a computer to perform an image processing method (paragraph 0054), said method comprising: chromatic checking to determine whether a pixel of the original image data is chromatic or achromatic (paragraph 0014); obtaining an image property of the pixel (paragraph 0015); designating a type of a predetermined converting condition for the pixel determined as achromatic in said chromatic checking step according to the image property obtained in said obtaining step (paragraph 0056); and converting the original image data into CMYK data for printing according to the predetermined converting condition (paragraph 0055).

With regard to claim 42, Yokochi discloses wherein said chromatic checking step determines the pixel as achromatic when values of RGB color components are identical to each other (paragraphs 0082, 0109).

With regard to claim 43, Yokochi discloses wherein said chromatic checking step determines the pixel as achromatic when differences in data value

among RGB components of the pixel fall within respective predetermined threshold values (paragraph 0109).

With regard to claim 44, Yokochi discloses wherein the predetermined condition applied to the pixel determined as achromatic is any one of a K monochrome converting condition using a black color and a normal converting condition using cyan, magenta, yellow, and black colors (paragraph 0056).

With regard to claim 45, Yokochi discloses wherein said obtaining step checks pixels in a predetermined area in the original image data to obtain the image property of the pixel (paragraphs 0015, 0016).

With regard to claim 46, Yokochi discloses wherein the image property of the pixel is either one of a first image property of including any chromatic pixel in the pixels in the predetermined area and a second property of not including any chromatic pixel in the pixels in the predetermined area, and said designating step designates the K monochrome converting condition to the pixel having the first image property (paragraphs 0072, 0077).

With regard to claim 47, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately preceding the pixel in a main scanning direction (paragraph 0015).

With regard to claim 48, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately succeeding the pixel in a main scanning direction (paragraph 0016).

With regard to claim 49, Yokochi discloses wherein the predetermined area comprises a predetermined number of sequential pixels immediately

preceding and succeeding the pixel in a main scanning direction (paragraphs 0015, 0090).

With regard to claim 50, Yokochi discloses wherein the predetermined area is formed with an m-by-n matrix surrounding the pixel, m and n being positive integer values greater than zero (paragraph 0090).

With regard to claim 51, Yokochi discloses a printing apparatus comprising: a printer engine (paragraph 0004); and a printer controller (paragraph 0043) storing a computer program product for carrying out an image processing method (paragraph 0044), the method comprising the steps of: chromatic checking to determine whether a pixel of the original image data is chromatic or achromatic (paragraph 0014); obtaining an image property of the pixel (paragraph 0015); designating a type of a predetermined converting condition for the pixel determined as achromatic in said chromatic checking step according to the image property obtained in said obtaining step (paragraph 0056); and converting the original image data into CMYK data for printing according to the predetermined converting condition (paragraph 0055).

With regard to claim 52, Yokochi discloses a hosting apparatus comprising: a computer (paragraph 0043); and a printer driver installed in said computer and storing a computer program product for carrying out an image processing method (paragraph 0044), the method comprising the steps of: chromatic checking to determine whether a pixel of the original image data is chromatic or achromatic (paragraph 0014); obtaining an image property of the pixel; designating a type of a predetermined converting condition for the pixel

determined as achromatic in said chromatic checking step according to the image property obtained in said obtaining step (paragraph 0056); and converting the original image data into CMYK data for printing according to the predetermined converting condition (paragraph 0055).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 31-40 are rejected under 35 U.S.C. 101 because these claims claim for program.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Vo whose telephone number is 5712701121. The examiner can normally be reached on 7:30AM-5:00PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on 5712727406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Quang N. Vo 6/20/07
Patent Examiner

TWYLER LAMB
SUPERVISORY PATENT EXAMINER